

REMARKS

Claims 1-35 are currently pending in the subject application and are presently under consideration. In a Final Office Action dated December 13, 2007, all claims were rejected. In the present response, Applicants have amended claim 1 and traverse the rejections as follows.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Objection of Claim 1

Claim 1 is objected to because of the following informalities: In the phrase “convert the one or more...” the second “the” is extraneous. Applicants have amended claim 1 to correct this deficiency.

II. Rejection of Claims 1-35 Under 35 U.S.C. §102(e)

Claims 1-35 stand rejected under 35 U.S.C. §102(e) as being anticipated by Harada (US 6,038,529). It was alleged that Harada teaches all of the elements of Applicants' claims.

With regard to claim 1, it was alleged that Harada teaches a transmitter comprising “a data coder configured to convert the digital data into one or more types of sound parameters” and a “sound synthesizer...configured to convert the one or more types of sound parameters into acoustic sound waves to acoustically transfer the digital data”. Similar features are found in claims 11, 21, 27, and 34. It was alleged that Harada teaches these claim features in Figures 3 and 4 and in column 4, line 51 through column 5, line 52. A close investigation of this reference does not teach or suggest the two claimed elements noted above.

Harada, in Figure 3, teaches a signal transmission unit 32 and a signal reception unit 33. The transmission unit 32 receives an audio signal from inputting element 11 and encodes the audio signal in accordance with ITU-T Recommendations G.728, which is a standard for speech encoding. The encoded data is then provided to transmission discriminator 35, which receives the encoded audio data and determines whether sound is present or not using demultiplexer 36. If sound is present, the encoded audio data is selected by data selector 15 and transmitted. If sound is not present, then “blank data” is

selected by data selector 15 and transmitted. (*See Harada, column 10, lines 22-55*)

Signal reception unit 33 receives encoded data, i.e., data encoded using the ITU-T Recommendations G.728 standard, from “inputting element” 21 and then provides the data to data converter 37. Data converter 37 comprises elements to select between encoded data received through inputting element 21 or encoded data generated by data generator 24. The chosen signal is then provided to data decoder 39, where sound selector 42 selects either an audio signal of artificial noise generated by noise generator 41 or an audio signal outputted from decoder 26, depending on whether a non-reception/reception flag is set or not. (*See Harada, column 10, line 56 – column 11, line 23*)

From the description of Figure 3 provided above, it is clear that Harada fails to teach or suggest a *transmitter* comprising “a data coder configured to convert digital data into one or more types of sound parameters”. Harada may teach a data coder (i.e., encoder 34), however Harada’s encoder does not convert digital data into sound parameters. Harada’s coder 34 converts speech into encoded digital data in accordance with ITU-T Recommendations G.728. Further, Harada’s encoder 34 is found within a *receiver*, not a transmitter as claimed by Applicants.

It is also clear that Harada fails to teach a *transmitter* comprising a “sound synthesizer...configured to convert the one or more types of sound parameters into acoustic sound waves to acoustically transfer the digital data”. Harada simply teaches a signal reception unit 33 that receives encoded data, i.e., speech data encoded using ITU-T Recommendations G.728, decodes the digital data, and provides it (or artificial noise) as an audio signal output. There is no teaching of any digital data being acoustically transmitted. Harada simply receives and decodes a digital signal and converts it to its original form, i.e., acoustic speech. The acoustic speech does not represent digital data.

Regarding Figure 4 of Harada, this figure simply teaches the signal transmission unit 32 and signal reception unit 33 used in an ATM configuration. There is no further detail of signal transmission unit 32 or signal reception unit 33 in Figure 4, nor does the discussion of Figure 4 (column 12, line 46- column 13, line 6) provide any further detail of signal transmission unit 32 or signal reception unit 33. Claims 1, 11, 21, 27, and 34, therefore, cannot be anticipated by Figure 4, because it also fails to teach or suggest Applicants’ claimed subject matter.

Column 4, line 51 through column 5, line 52, as cited in the Final Office Action, is a general teaching of the Harada communication system. It describes an “encoding transmission method and apparatus” that transmits data when a “sound-present” period is detected and transmits “blank data” in sound-absent periods. (*Harada, column 4, lines 51-62*) Harada also teaches a “reception decoding method and apparatus” that receives and processes encoded data if a “sound-present” period is detected and generates “blank data” if a “sound-absent” period is detected. (*Harada, column 5, lines 18-28*) There is no detail in the cited passage that specifically teaches how Harada’s invention is implemented, and, therefore, there is nothing in the cited material that teaches or suggests Applicants’ claimed subject matter. For instance, there is no teaching whatsoever of a transmitter comprising “a data coder configured to convert the digital data into one or more types of sound parameters” or a “sound synthesizer...configured to convert the one or more types of sound parameters into acoustic sound waves to acoustically transfer the digital data”.

For the reasons mentioned above, the rejection to independent claims 1, 11, 21, 27, and 34 should be withdrawn. In addition, the rejection to claims 2-5, 12-15, 22, 23, and 28 should be withdrawn as being dependent on allowable claims.

With regard to claim 6, it was alleged that Harada teaches a *receiver* comprising “a sound analyzer configured to receive acoustic sound waves and to extract one or more types of sound parameters from the received acoustic sound waves” and “a data decoder coupled to the sound analyzer and configured to convert the extracted one or more types of sound parameters into...digital data”. Similar features are found in claims 16, 24, 29, and 35. It was alleged that Harada teaches these claim features in Figures 3 and 4 and in column 4, line 51 through column 5, line 52. A close investigation of this reference does not teach or suggest the two claimed elements noted above.

Harada fails to teach or suggest a *receiver* having “a sound analyzer configured to receive acoustic sound waves and to extract one or more types of sound parameters from the received acoustic sound waves”. Although this feature may be argued to be taught by Harada, i.e., sound detector 12 and encoder 34, Applicants assert that these two functional elements are found in signal *transmission* unit 32, not in signal *reception* unit 33.

Further, Applicants do not believe that Harada teaches a receiver comprising “a data decoder coupled to the sound analyzer and configured to convert the extracted one or more types of sound parameters into...digital data”. Once again, if one were to assume, *arguendo*, that this feature is taught by Harada, i.e., decoding unit 39 and/or decoder 26, Applicants assert that these functional elements are not coupled to the “sound analyzer” and, further, that decoding unit 39/decoder 26 is not configured to convert sound parameters into digital data. Decoding Unit 39/decoding unit 26, as taught by Harada, is used to select either an audio signal generated by decoded data or the audio signal of artificial noise generated by noise generator 41 and present the audio signal to a user. Harada, therefore, teaches a receiver that converts digital data into an audio signal as opposed to Applicants’ claimed subject matter, which recites “a data decoder...configured to convert the extracted...sound parameters into...digital data”.

Based on the foregoing, Applicants respectfully request that the rejection to claims 6, 16, 24, 29, and 35 be withdrawn. In addition, the rejection to claims 7-10, 17-20, 25, 26, 29, and 35 should be withdrawn as being dependent on allowable claims.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [QUALP821USA].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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